

THE CAUSES OF ECONOMIC FREEDOM

A MODEL OF PROSPERITY

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ii. Abstract

Economic freedom in the form of open markets and minimal government intervention has been demonstrated in numerous studies to be the most effective approach for achieving wealth and prosperity around the world. This paper examines various sociopolitical and geographic variables as well as changes in their values over time to determine their potential causal impact on the level of economic freedom across a large array of countries. It hypothesizes that democratic governance is of prime influence on free market growth. Having been established as a beneficiary of free markets, Gross Domestic Product (GDP) levels are analyzed for reciprocal causality regarding economic freedom levels, while corruption, civil rights, religiosity, and geography are also explored as potential economic freedom determinants. Of the variables explored, only democratic governance, corruption, and changes to GDP were found to be statistically significant, along with certain regional categories primarily located in Africa. The other variables of interest, initial GDP levels, fundamental rights, and religiosity were not found to be significantly related to economic freedom. This study also found that changes in economic freedom ratings over time were significantly related only to changes in GDP levels, of all the variables studied. The lack of statistical significance found in the initial GDP variable was an unexpected result that potentially calls into question prior research indicating a stronger relationship to economic freedom.

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1. Introduction

The world is currently facing many tough questions about how to deal with such problems as rising populations, growing poverty levels, global pandemic, and civil unrest. As we venture forward into the new millennium, it is important to establish accurate economic models that use factors that most support the conditions necessary for prosperity to flourish, and to identify the proper goals that should be advanced toward creating such conditions.

The influence of the free market on prosperity has been well documented. Multiple studies have confirmed this relationship using various economic indexes and measures of affluence.¹ Essentially, economic freedom has been found to promote wealth and prosperity.² Although there are varying degrees of agreement regarding the magnitude of the effect, free markets have been demonstrated to be associated with higher levels of prosperity across an array of variables constituting a myriad of models.¹ Other causal factors of societal wealth generation may have been observed across many studies, but the general consensus among most scholars is that free markets are an exceedingly effective approach to economic policy around the world.

What, then, are the conditions that generate economic freedom, and what are the variables that most contribute to its endurance? These questions have not yet been answered quite as definitively. Although the search for the causes of economic freedom has been undertaken by many researchers over recent decades, there is disagreement

¹ De Haan, Jakob, Susanna Lundström, and J. E Sturm. 2006. "Market-oriented institutions and policies and economic growth: A critical survey." *Journal of Economic Surveys*.

² Geloso, Vincent. 2019. "The Link Between Prosperity and Freedom Is Even Stronger than You Think." American Institute for Economic Research.

among experts over the impacts of certain key variables and a dearth of models that adequately identify the primary factors that foster it. While earlier studies have maintained that initial per capita Gross Domestic Product (GDP), political representation, energy exports, ethno-linguistic tensions, Marxist socialist philosophies, religion, geography and other factors are significantly related to economic freedom, none of the prominent models proposed to date are robust enough to account for all the conditions that most contribute to the emergence, growth and sustainment of free market economies. Researchers today acknowledge that more is known about what stifles economic freedom than what promotes it.³

To assist in the study of open-market phenomena, the Economic Freedom World (EFW) rating system was developed by The Fraser Institute to measure countries according to the level of economic freedom they possess. The rating is universally recognized as the standard bearer for measuring international economic freedom levels.⁴ Many related analyses have revealed a strong relationship between EFW scores and prosperity.⁵ This study tests multiple variables of interest for impact on EFW ratings, as a proxy for economic freedom.

This paper attempts to reconcile competing research and potentially uncover fresh new insight on this vital subject. It involves the analysis of economic, political, institutional, religious, and geographic data across the world, and the examination of

³ March, R.J., Lyford, C. & Powell, B. 2017. "Causes and Barriers to Increases in Economic Freedom." *International Review of Economics*.

⁴ Easton, S. T., and Walker, M. A. 1992. "Economic Freedom World." Fraser Institute.

⁵ Gwartney, J., Lawson, R. and Block, W. 1996. "Economic Freedom in the World, 1975-1995." Vancouver: Fraser Institute.

changes over time to reveal potential temporal effects. The intent of this study is to better inform the general understanding of economic freedom to help improve the ability to increase prosperity throughout the world.

The findings herein support the conclusion that initial per capita GDP may not be as significantly related to economic freedom as many have claimed, but that long-term changes in GDP may have a greater connection (long-term being defined as eight years for the purposes of this study). The effects of political rights appear to trump civil rights when it comes to promoting economic freedom as only the former was shown to be significantly related. Lack of public corruption also appears to have a considerably positive influence on free markets, while the overall religiosity of a country was not shown to be a significant factor in determining the level of freedom within its economy. Regional effects were observed in seemingly unrelated parts of the world's geography, which potentially challenges prior studies asserting the importance of tropical or coastal influences on a country's economic freedom level.

2. Literature Review

2.1 Economic Freedom Studies

The dawn of western liberalism ushered in an age of freedom and liberty in the marketplace that has provided researchers with a data rich environment for studying different economic models as implemented over recent centuries. This section presents the essence of the body of research involving attempts to develop the economic models that best reflect the factors that impact economic freedom levels worldwide.

Arguably the most influential economic hypotheses of the 20th century was the Communist Manifesto. In it, Marx and Engels describe the economic globalism of their

time as an opportunity to reduce class disparities and allow their agenda to succeed and spread across the planet.⁶ Ultimately, the USSR was unable to reject the null hypothesis in this rather costly experiment, due in large part to the lack of economic freedoms implemented in the Soviet model as opposed to the conceptual utopian version theorized by its inventors. It may be somewhat surprising to realize that socialist philosophies still have widespread contemporary appeal in light of the many such notorious examples in history and tragedies that currently exist in such places as Cuba and Venezuela,⁷ as well as the growing threats from socialist regimes such as North Korea and China,⁸ The reasoning prevails, nonetheless. This paper attempts to present compelling counter arguments to those that exist in the zeitgeist in favor of demonstrably unachievable socialist ambitions.

Francis Fukuyama extolled the virtues of classic liberalism in the context of political and economic freedom, which ostensibly provides the basis for the wealth creation that occurs wherever democracy and free markets prevail.⁹ He presents western nations as examples of how economic liberty offers the best approach to societal wellbeing with its focus on the needs of the individual, who in turn feed the economic engine through efforts to pursue their own best interests. Fukuyama points out that there is no historical example of an economic model that works well as free market capitalism. This study provides evidence that presence of democratic governance is associated with

⁶ Engels, Karl Marx and Friedrich. 1848. "The Manifesto of the Communist Party." Moscow.

⁷ Carrasco, Jorge C. 2019. "Venezuelan Democracy Was Strangled by Cuba, Decades of infiltration helped ruin a once-prosperous nation." Foreign Policy Magazine

⁸ Cronk, Terri Moon. 2019. "China Poses Largest Long-Term Threat to U.S., DOD Policy Chief Says." US Department of Defense

⁹ Fukuyama, Francis. 1989. "The End of History." National Interest. Washington, DC.

the existence free market conditions and builds on Fukyama's body of work promoting such claims.

While many studies have confirmed the link between capitalism and prosperity, there have been fewer efforts focusing on the casual factors of economic freedom itself. De Haan notes the lack of research into the significant causes of economic freedom and observes the need for further inspection of the variables that stimulate the propagation of free market systems.¹ The La Porta study is one of the earlier attempts to thoroughly investigate prosperity and free markets through examination of socio-economic and geographic factors on governmental effectiveness in various economic, political, and cultural areas.¹⁰ This analysis is one of the first to establish a causal connection between GDP and economic freedom. Countries with low initial GDP levels were found to have more poorly performing governments. The study also finds that socialism is not conducive to effective governance, nor are the influences of Catholic and Islamic faiths. Further, in studying regional influences, the researchers conclude that countries in tropical locations generally perform worse than those outside the tropics. The impact of these variables on governmental performance, as presented by La Porta, form much of the basis for the variables of interest chosen for this thesis. Having been determined to be significantly related to governmental performance in general, many of these factors are further examined to ascertain if they wield significant influence on economic freedom levels.

¹⁰ La Porta, Rafael, Florencio Lopez-DeSilanes, Andrei Shleifer, and Robert W. Vishny. 1999. "The Quality of Government." *Journal of Law, Economics and Organization*. Oxford: Oxford University Press

Although the effects of democracy have long been assumed to promote capitalism and economic growth, studies in 2011 found that liberalization within governments and economies does not necessarily equate to prosperity, but that only countries that attract high levels of foreign investment truly benefit from free market policies.¹¹ Other studies have asserted that the misperception of risk associated with free markets inhibits growth in economic freedom due to an aversion to accompanying economic turbulence¹³ and inflationary crises.¹⁴ Bjornskov construes that such risk aversion may be central to explaining the reluctance of many countries to adopt economic freedoms due to the notion that capitalistic economies are more prone to crises and longer subsequent periods of recovery, when in fact free markets are actually less exposed to risk of economic crises and are associated with shorter recovery periods and less damage when such crises do occur.¹² The study also argues that socialist philosophies propagated by opponents of capitalism contribute to the misconception that free market approaches are inherently riskier and that countries should be reluctant to fully adopt them.

Researchers who recently examined capitalism's importance in today's turbulent world surmise that capitalism and democracy interact to help guide countries through economic crises.¹³ This tends to support earlier propositions by Pitlik that such crises actually tend to encourage the adoption of open markets to a certain degree.¹⁴ To help clarify the debate regarding socialism versus democracy, this paper attempts to

¹¹ Cohen, Joseph Nathan. 2011. "Economic Freedom and Economic Growth: Questioning the Claim that Freer Markets Make Societies More Prosperous." Queens College, NY

¹² Bjornskov, Christian. 2015. "Economic Freedom and Economic Crises." Denmark: Aarhus University.

¹³ Iversen, Torben and Davis Soskice. 2019. *Democracy and Prosperity Reinventing Capitalism Through a Turbulent Century*. Princeton, New Jersey: Princeton University Press.

¹⁴ Pitlik, H., Wirth, S., 2003. "Do crises promote the extent of economic liberalization? An empirical test." *European Journal of Political Economy*

demonstrate the link between democracy and economic freedom as the most conducive to successful economies, thus supporting the argument that, in times of economic turbulence, it is essential to maintain logical approaches to fiscal policy and resist the temptation to implement radical, transformative, unproven, and ultimately, regressive alternatives.

In 2012, studies on economic freedom in the developing world found that low initial GDP had an indirect relationship with increases in freedom ratings.¹⁵ The researchers conclude that, as economies grow through the benefits they receive from economic freedom, countries become more stable and tend to embrace even more free market policies, which further adds to their growth and economic stability. Thus, the economic freedom curve tends to slope steadily upward for the countries that implement and practice it.

Attempting to identify the most prevalent influences on economic freedom, researchers in 2017 concluded that low initial GDP was negatively related to economic freedom growth due mainly to ethno-linguistic tensions and high energy exports in developing countries.³ The study confirms Snyder's conclusions that countries generally tend to continue to increase the freedom levels in their economies as they reap the benefits of such policies.¹⁵ This thesis further examines the influence of initial per capita GDP levels on economic freedom in an endeavor to improve the understanding of this key relationship.

¹⁵ Snyder, Noel Campbell and Thomas. 2012. "Economic Freedom and Economic Volatility." University of Central Arkansas.

While researchers have recently confirmed long held beliefs of a negative relationship between perceived corruption and per capita GDP,¹⁶ there are few studies that have examined the effects of corruption on economic freedom. Some researchers have found that corruption impedes the success of democratic governments by undermining trust in civic institutions,¹⁷ while others contend that certain religious or political factors may influence corruption levels within a country.¹⁸ The amount of study to date, however, addressing the effects of corruption on open-market growth has not been considerable.

Religion's effect on economics has been a hotly contested subject of modern debate since Max Weber first pronounced shortly after the dawn of the 20th century that Protestantism leads to more prosperity.¹⁹ By century's end, La Porta had determined that the influences of some religious sects actually tend to negatively affect governmental performance and the adoption of capitalistic practices.²⁰ Studies shortly afterward examining the influence of religion on different aspects of economic freedom brought varying results. North establishes an indirect relationship between religious cultures and the rule of law,²⁰ while Potrafke concludes that Islam tends to reduce economic freedom whereas the Protestant form of Christianity may be minimally conducive to it.²¹ Shadabi

¹⁶ Mustapha, Nazar. 2014. "The Impact of Corruption on GDP per Capita." *Journal of Eastern European And Central Asian Research*. Dillard University, New Orleans, LA

¹⁷ Gutiérrez-Romero, Roxana. 2014. "An Inquiry into the Use of Illegal Electoral Practices and Effects of Political Violence and Vote-buying." Oxford: Oxford University Press.

¹⁸ Treisman, Daniel. 2000. "The Causes of Corruption: A Cross National Study." *Journal of Public Economics*. Department of Political Science, University of California, Los Angeles, CA

¹⁹ Weber, Max. 1905. "The Protestant Ethic and the Spirit of Capitalism." Allen and Unwin. Zurich, CH

²⁰ North, Charles M., Wafa Hakim Orman, and Carl R. Gwin. 2013. "Religion, Corruption and the Rule of Law." *Journal of Money, Credit and Banking*.

²¹ Potrafke, Arye L. Hillman and Niklas. 2016. "Economic Freedom and Religion: An Empirical Investigation." Munich: CESifo Working Paper Series 6017.

contests claims of religion leading to more corruption,²² while Grim maintains that religious freedom tends to be associated with the development of more competitive businesses.²³

Inquiry into the effects of religion on GDP in Ghana finds that some religious factions in that country teach values that may ultimately yield prosperity,²⁴ whereas a more robust study into the relationship between religion and GDP recently concludes that religion generally hinders GDP and that economically free countries tend to be more secular.²⁵ This paper attempts to establish the relationship between the overall religiosity of a country's population and the level of economic freedom that exists within its marketplace.

La Porta and Gallup render similar conclusions regarding certain geographical influences on economic freedom, indicating that countries near the equator tend to score poorer regarding governmental performance,¹⁰ and that countries in tropical locales tend to have less economic freedom.²⁶ By using multiple regional groupings, this thesis includes geographic considerations in the analysis of economic freedom levels to further explore these findings and potentially uncover new insights from global patterns that may emerge.

²² Shadabi, Leila. 2013. "The Impact of Religion on Corruption." *The Journal of Business Inquiry*. Department of Economics, School of Economics and Management, Semnan University, Semnan, Iran.

²³ Grim, Brian J., Greg Clark and Robert Edward Snyder. 2014. "Is Religious Freedom Good for Business?: A Conceptual and Empirical Analysis." Georgetown University.

²⁴ Gundersen, Sedefka V. Beck and Sara J. 2016. "A Gospel of Prosperity? An Analysis of the Relationship Between Religion and Earned Income in Ghana, the Most Religious Country in the World." *Journal for the Scientific Study of Religion*.

²⁵ Ruck, Damian & Bentley, R. Alexander & Lawson, Daniel. 2018. "Religious change preceded economic change in the 20th century." *Science Advances*

²⁶ Gallup, John Luke, Jeffrey D. Sachs, Andrew D. Mellinger. 1999. "Geography and Economic Development." Center for International Development, Harvard University, Cambridge, MA

2.2 Summary

Current scholarship has established a foundational understanding the workings of economic freedom around the world and the approaches that foster such conditions. This thesis will examine the following parameters that have been submitted as most impactful:

- Democracy
- Initial GDP
- Corruption
- Religion
- Geography

Building on the existing corpus of research listed in Table 1, this study will attempt to determine the extent to which economic freedom levels are influenced by these important variables of interest.

Table 1. Relevant EFW Studies

| Variable | Year | Author | Research Topic | Confirms | Effect on EFW |
|-------------|------|-----------|--------------------------------------|-----------|----------------|
| Democracy | 1999 | La Porta | Socialism and Effective Government | | Negative |
| | 2011 | Cohen | Capitalism and GDP | | Little Effect |
| | 2012 | Snyder | Risk Aversion to Economic Freedom | | Positive |
| | 2015 | Bjornskov | Risk Aversion to Economic Freedom | | Negative |
| | 2017 | March | Risk Aversion to Economic Freedom | Bjornskov | Negative |
| | 2019 | Iverson | Democracy and Prosperity | | Positive |
| Initial GDP | 1999 | La Porta | Initial GDP and Effective Government | | Positive |
| | 2012 | Snyder | GDP and Economic Freedom | | Positive |
| | 2017 | March | Initial GDP and Economic Freedom | Snyder | Positive |
| Corruption | 2014 | Gutierrez | Corruption and Democracy | | Negative |
| Religion | 1905 | Weber | Religion and Capitalism | | Positive |
| | 1999 | La Porta | Religion and Effective Government | | Negative |
| | 2000 | Treisman | Religion and Corruption | | Type Dependent |
| | 2013 | Shadabi | Religion and Corruption | | No Effect |
| | | North | Religion and Corruption | La Porta | Negative |
| | 2014 | Grim | Religion and Business | | Positive |
| | 2016 | Potrafke | Religion and Economic Freedom | | Type Dependent |
| | | Gundersen | Religion in Ghana | Grim | Positive |
| Geography | 2018 | Ruck | Religion and GDP | La Porta | Negative |
| | 1999 | La Porta | Equator and Effective Government | | Negative |
| | | Gallup | Tropics and Economic Freedom | La Porta | Negative |

3. Data and Methods

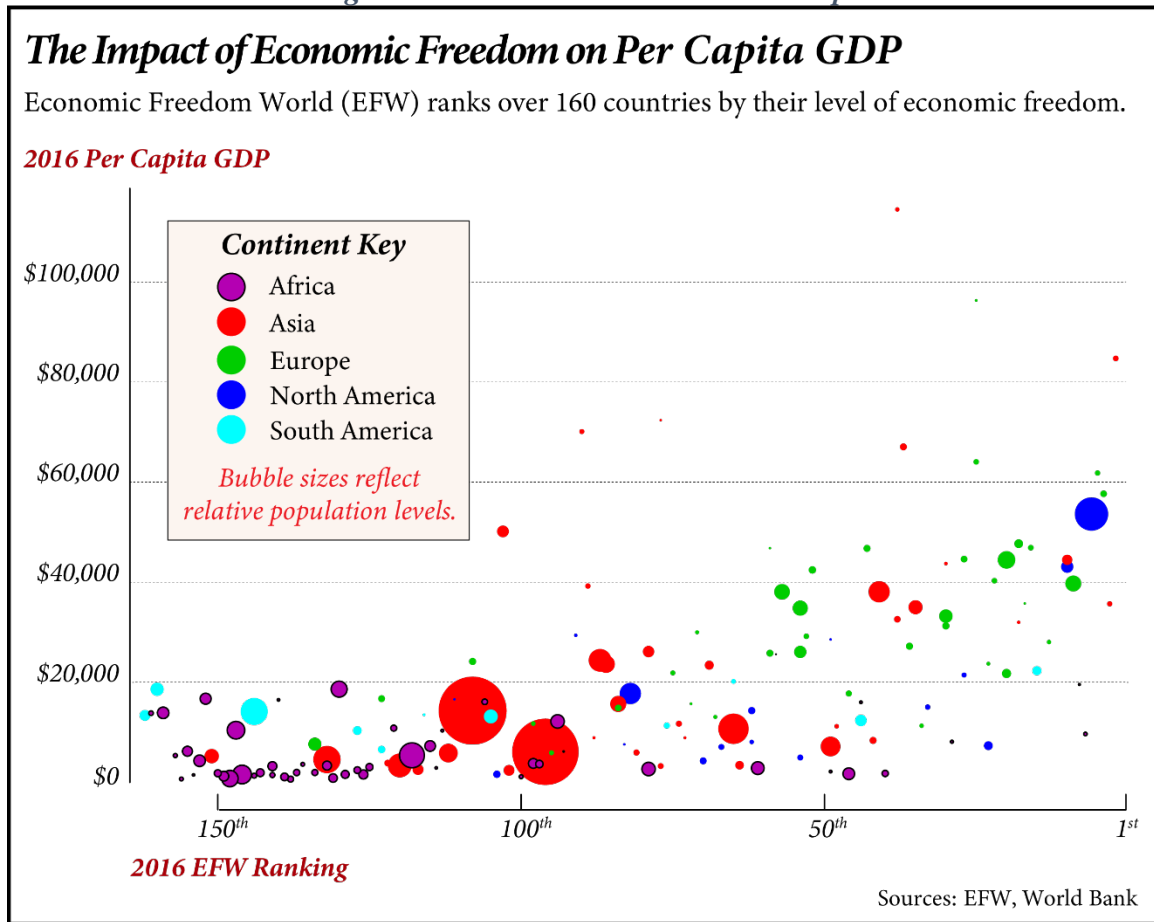
This study analyzed 2016 data and their changes from 2008 values, for an eight-year delta. This duration was chosen to minimize missing data from countries that do not have complete scores from past decades for all the factors examined. The data was used to construct both static and temporal regression models using the dependent and independent variables as described in the following sections.

3.1 Dependent Variables

1. **Economic Freedom World (EFW) Score:** Metric developed by the Fraser Institute to rate and rank each country's level of economic freedom using such factors as the size of government, personal property rights, monetary soundness, trade, governmental regulation, and integrity within the legal system.⁴ Based on a ten-point scale, a score of 1 indicates absolutely no freedom within an economy while a score of 10 indicates a completely free and open system.
2. **Change in EFW Score:** Eight-year EFW score delta between the years 2008 and 2016. Values are shown as the total percentage change in scores over this time period.

The EFW variable was chosen as the dependent variable of interest due to the firmly established link between this measure and per capita GDP, as previously discussed. As an illustration of the demonstrably positive influence of economic freedom on wealth and prosperity, Figure 1 depicts the direct relationship between EFW rankings and per capita GDP across 160 countries. The significance of this relationship necessitates the consideration of reciprocal causation as well as the identification of other potential EFW determinants.

Figure 1. The EFW – GDP Relationship



3.2 Independent Variables

- Representative Government (RG) Score:** One of the governmental ratings developed by the Global State of Democracy (GSoD) to grade the level of representation that citizens have within a country's political system.²⁷ This score is stated as a percentage, with 100% indicating total civic representation and 0% indicating a completely non-democratic system of government.
- Fundamental Rights (FR) Score:** One of the governmental ratings developed by GSoD to grade the level of civil rights that citizens possess within a country.²⁷ This score is stated as a percentage, with 100% indicating the existence of

²⁷ GSoD. International Institute for Democracy and Electoral Assistance (Int'l IDEA). Stockholm, Sweden

extremely high levels of fundamental rights and 0% indicating a complete lack of such rights within a system.

- **Per Capita Gross Domestic Product (GDP):** A statistic maintained by the World Bank to gauge each country's relative prosperity level, which represents its annual wealth generation per person stated in dollars.²⁸
- **Corruption Perception Index (CPI):** A metric developed by Transparency International to assess the perceived level of corruption within a country's public sector using a variety of surveys and expert analysis.²⁹ This score is also stated as a percentage with 100% indicating that a country is perceived to have absolutely no corruption while a score of 0% would be indicative of a highly corrupt system.
- **Religiosity:** A rating by Gallup based on a survey that estimates the percentage of a population that considers themselves to be religious. The absence of prior year data precluded inclusion of changes to this variable in the temporal model.³⁰
- **UN Region:** One of 20 regional designations established by the United Nations to provide granularity into geographic locations beyond continental groupings. The baseline for the 20-category UN Region metric was the North American region, comprised of the US and Canada.²⁸
- **8-Year Delta:** Percentage changes in applicable variables between 2008 to 2016. The religiosity and region variables are excluded from this analysis.

Representative government and fundamental rights metrics are included to gauge the level democracy within a country's government. Countries with higher levels of

²⁸ The World Bank. <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>

²⁹ Transparency International. Corruption Perception Index. Berlin, Germany

³⁰ Gallup Poll. 2019. Gallup, NM

democratic representation and civil rights are expected to be associated with freer markets, which would further demonstrate how democracy is more conducive to the generation of wealth and prosperity than alternative systems. With the concept of representative government being more strongly associated with democratic principles, it was chosen over fundamental rights as the main input variable of interest for this study.

The inclusion of GDP in the model allowed for the inspection of other potential influences while controlling for this most important and widely utilized variable. It is expected that higher initial GDP levels will be associated with more economic freedom, as has been found in the prior studies discussed. Since corruption in the public sector is presumed to be a deterrent to the economic participation essential for maintaining a robust economy, countries perceived as being highly corrupt are expected to be associated with lower economic freedom levels. Similarly, religion is presumed to have a stifling effect on political freedoms, which should then be reflected in poor economic freedom ratings. By examining the UN regional designations, the model will also control for geographic effects on the output variable. Although indications of regional influences are anticipated, it is not projected that the data will show a tendency for countries to be significantly affected by their proximity to the tropics or the equator, as has been proposed. These effects are expected to be localized and not considerably impactful globally. The temporal changes to the variables in the model are all expected to be positively correlated to changes in economic freedom levels.

3.3 Hypothesis

This study proposes that economic freedom levels are impacted by the amount of political representation that citizens possess within a country's system of government.

The null hypothesis states that mean EFW ratings are not affected by different levels of representative government.

4. Results

The results of Model 1, which regressed the static economic freedom scores against the suite of independent variables listed in Section 3.2, are shown in Table 2. This analysis also supports the hypothesis that democratic political representation has a positive impact on economic freedom, as a one-unit change in representative government score is associated with an increase in EFW scores of 1.75 points. Fundamental rights, however, do not appear to be significantly associated with economic freedom, nor do temporal changes in these rights, which suggests that the economic benefits of democracy may be derived more from the virtues of the structural nature of its political institutions than the civil rights that they tend to endow. Temporal changes in fundamental representation do not appear to equate to greatly improved EFW scores either, possibly due to the length of time required for such improvements to take effect.

Somewhat surprisingly, the initial GDP variable was not shown to be a significant determinant of EFW levels. The implications of this finding would suggest that high initial per capita GDP levels are not necessarily as predictive of high levels of economic freedom as proposed when the other factors are considered. This does not contradict the widely accepted view that countries with more economic freedom generally experience more prosperity. Rather, it indicates that there may be no reciprocal effect within this relationship. The eight year change in per capita GDP, however, does support the GDP connection to economic freedom levels, suggesting that while countries with high initial per capita GDP may not have higher EFW ratings in general, countries that experience

growth in GDP tend to improve their economic freedom levels as a result. This effect does not exceed that of representative governance, however, which appears to have a greater tendency to move countries toward free markets.

Table 2. Model 1: EFW Regression Model

| Independent Variable | Description | Estimate | Error | p-value |
|-----------------------------|---|-----------------|--------------|----------------|
| RG | Representative Government Score | 1.75 | 0.68 | 0.01 * |
| RGd8 | % Change in RG over 8 Years | 0.13 | 0.12 | 0.30 |
| FR | Fundamental Rights Score | -0.12 | 0.95 | 0.90 |
| FRd8 | % Change in FR over 8 Years | -0.24 | 0.67 | 0.72 |
| GDP | Initial per Capita GDP | 0.00 | 0.00 | 0.72 |
| GDPd8 | % Change in GDP over 8 Years | 0.99 | 0.36 | 0.01 ** |
| CPI | Corruption Perception Index Score | 2.13 | 0.76 | 0.01 ** |
| CPId8 | % Change in CPI over 8 Years | -0.13 | 0.31 | 0.67 |
| Relig | Proportion of Country that is Religious | 0.40 | 0.41 | 0.33 |
| Africa (East) | UN Region Designation | -0.57 | 0.47 | 0.23 |
| Africa (Mid) | UN Region Designation | -0.98 | 0.53 | 0.07 . |
| Africa (North) | UN Region Designation | -1.19 | 0.52 | 0.02 * |
| Africa (South) | UN Region Designation | -1.01 | 0.48 | 0.04 * |
| Africa (West) | UN Region Designation | -1.11 | 0.47 | 0.02 * |
| America (Cent) | UN Region Designation | -0.07 | 0.47 | 0.88 |
| America (South Tropic) | UN Region Designation | -1.33 | 0.48 | 0.01 ** |
| America (South) | UN Region Designation | -0.95 | 0.47 | 0.04 * |
| Asia (Cent) | UN Region Designation | 0.08 | 0.53 | 0.88 |
| Asia (East) | UN Region Designation | -0.11 | 0.48 | 0.82 |
| Asia (South) | UN Region Designation | -1.03 | 0.50 | 0.04 * |
| Asia (Southeast) | UN Region Designation | 0.03 | 0.46 | 0.94 |
| Asia (West) | UN Region Designation | 0.07 | 0.43 | 0.87 |
| Australian | UN Region Designation | -0.01 | 0.52 | 0.98 |
| Caribbean | UN Region Designation | -0.22 | 0.50 | 0.65 |
| Europe (East) | UN Region Designation | -0.21 | 0.44 | 0.63 |
| Europe (North) | UN Region Designation | -0.17 | 0.41 | 0.68 |
| Europe (South) | UN Region Designation | -0.27 | 0.43 | 0.52 |
| Europe (West) | UN Region Designation | -0.36 | 0.42 | 0.39 |

The corruption perception scores had the greatest impact in the model, accounting for a more than two-point increase in EFW rating for every unit increase in CPU score, which suggests that economic freedom is most successfully nurtured when it exists in a corruption free environment. While changes in this variable over time may not contribute

to EFW ratings, the impact of the static CPI scores on the EFW variable indicates that anti-corruption efforts are critical in any attempts undertaken to improve economic freedom within a society.

Although there may be inherent collinearity between the EFW and CPI variables, due to the inclusion of corruption survey data within the EFW rating, this effect is likely minimal considering the relatively small contribution of the corruption component to the overall EFW score, which is comprised of more than 60 other elements, and the different aspects of corruption measured by both ratings. This is further evinced by the lack of significance of the fundamental rights variable, which measures similar legal system attributes and is arguably closer aligned with the EFW ratings methodology. Further, removal of the CPI variable from the model does not impact the statistical significance of the other coefficients, which further supports its inclusion in the model.

General religiosity does not appear to impact EFW levels, which refutes the contention that more religious countries have less open economies. This analysis does not examine the impacts of specific religions or their various factions, not does it account for theocratic forms of government, but the results seem to indicate that religiosity in general does not significantly impact economic freedom in either direction. It appears that arguments posed by some of the studies claiming the negative effect of religion on economic freedom may be inaccurate in their assessment of religion's true impact in this regard, though the influence of religion on prosperity itself is not directly addressed here.

The results of the geographical analysis indicate a strong continental influence on economic freedom that may supersede previously asserted regional characteristics such as tropical proximity or maritime coastlines. While the African continent appears to be

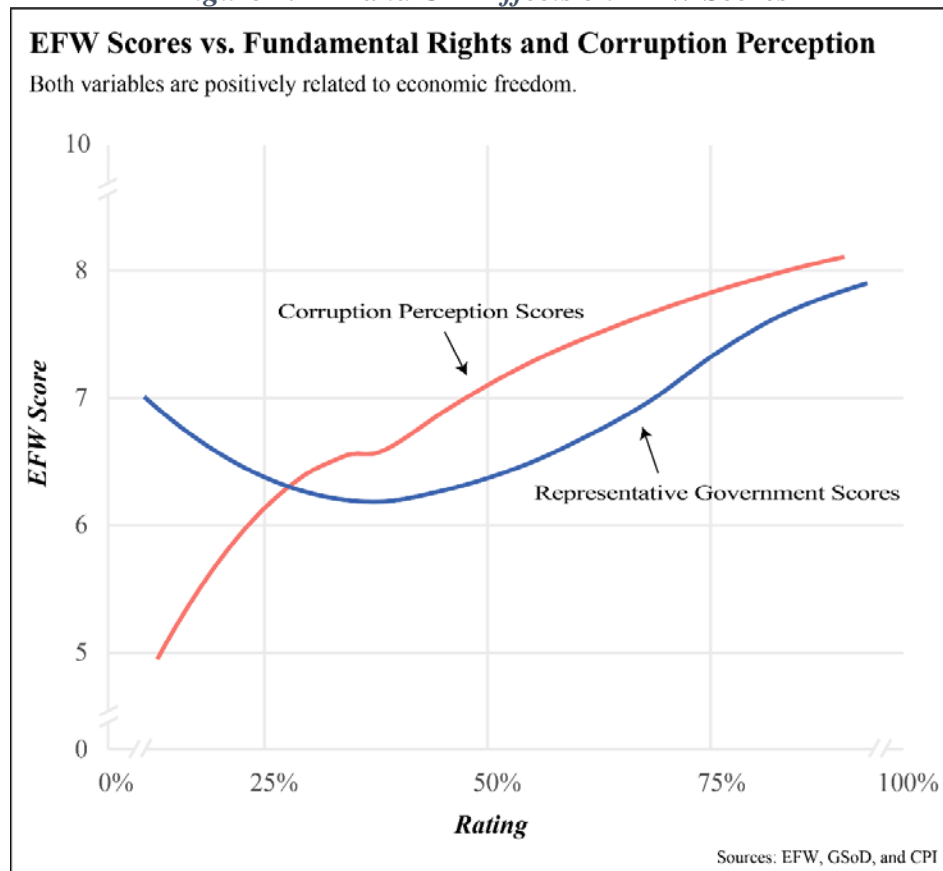
significantly associated with lower EFW scores in general, this does not appear to be mainly related to tropicality as the two of regions that do not meet statistical significance, Middle and East Africa, are within tropical boundaries, while the North Africa region, which is not tropical, does show a significant inverse relationship to EFW scores. Given the underperforming nature of Africa in economic freedom measures across the continent, it is not be surprising that some researchers presume a greater degree of generality applies than is warranted for the propensity of tropical or equatorial locality to constitute the main impediments to economic freedom in these countries. The fact that most of the continent falls within both tropical boundaries, and much of its population resides in equatorial regions, potentially skews that data toward the appearance of tropical or equatorial influences.

A similar pattern emerges with South America, which shows significant negative effect regarding both the tropical and non-tropical regions within the continent, and although the tropical region shows a greater degree negative impact, the difference is not substantial. While the only Asian region to show a significant association with EFW scores is the South Asia region, the remaining Asian regions, some of which have many more tropical members, do not show any statistical significance in the model. Additionally, the Caribbean and Central American regions, both firmly situated in tropical locations, were not shown to be significantly associated with influencing economic freedom levels either. In addition to potentially refuting the conclusions of prior research, the results of the data analysis highlight the global patterns in economic freedom deficiencies that may be more likely attributed to geopolitical causes than to geographical ones.

The same apparent flaw lies in the assertion that coastal proximity has a significant influence on economic freedom, given that most of the countries in the poor performing regions of the model are coastal and some of the regions that have numerous non-coastal members do not show significant impact on EFW scores. Rather than point to lack of coastal access as the most important hinderance to establishing free markets, the model suggests that deficiencies in economic freedom are more specific to continents, particularly Africa and South America, than to the distinct geographic characteristics.

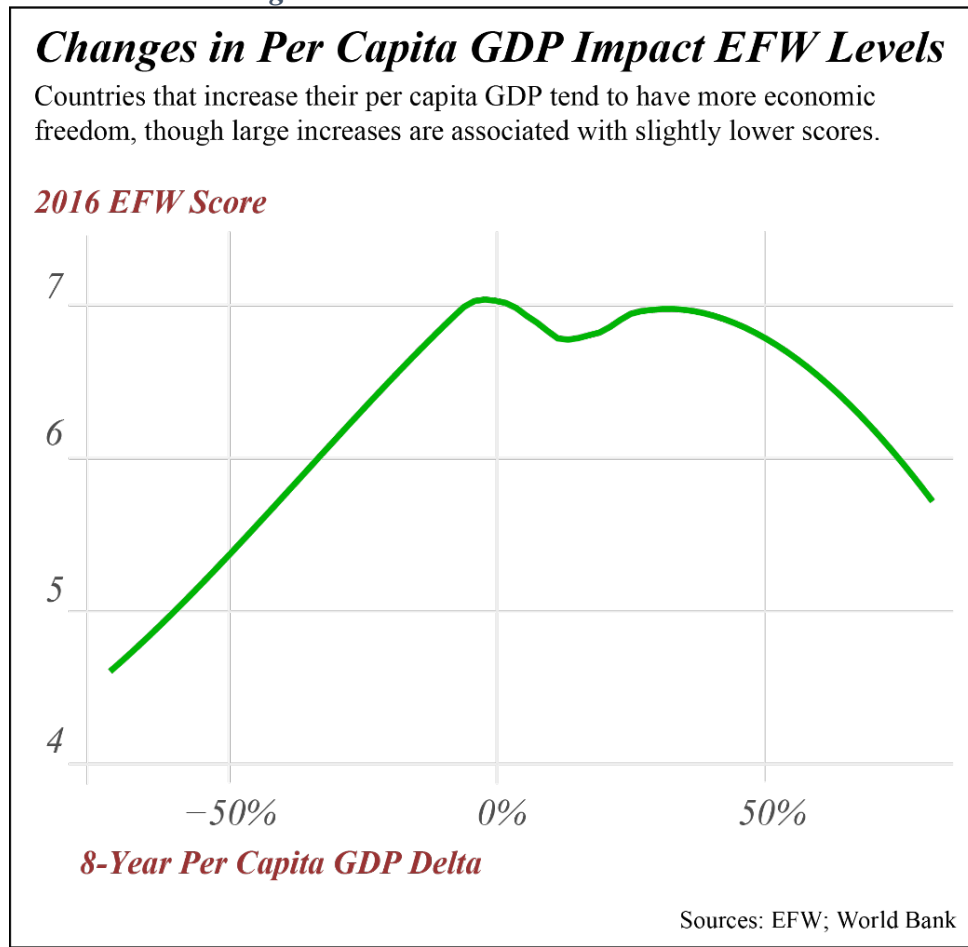
Model 1 indicates that economic freedom may be most strongly related to perceived corruption, democratic governance, and prosperity fluctuations, respectively. To further illustrate these effects, Figure 2 depicts he fairly direct relationships that exist

Figure 2. FR and CPI Effects on EFW Scores



between both the fundamental rights and corruption variables and economic freedom ratings, while Figure 3 reveals the more complex relationship between changes in per capita GDP and EFW levels. These results indicate that perceived corruption has the most linear relationship with EFW scores while representative governance tends to increase economic freedom uniformly only after reaching certain levels. Although changes in per capita GDP have a positive impact EFW levels overall, this effect is linear only as it applies to negative changes in GDP. Positive changes in GDP are only associated with increases in EFW scores to a certain degree. As countries approach a 50% increase in per capita GDP, they tend to curtail economic freedoms.

Figure 3. GDP Delta and EFW Scores



While the results of Model 1 reveal potential causality among these variables in determining economic freedom levels, as well as a likely geographical influence, they also evidently call into question the supposed impacts of the initial GDP, fundamental rights, and religiosity variables on EFW ratings, as claimed by previous studies.

Model 2 examines potential causes of temporal changes to EFW scores. The results, shown in Table 3, indicate that only changes in per capita GDP are significantly related to changes in economic freedom, and that this effect is sizeable. A one percent

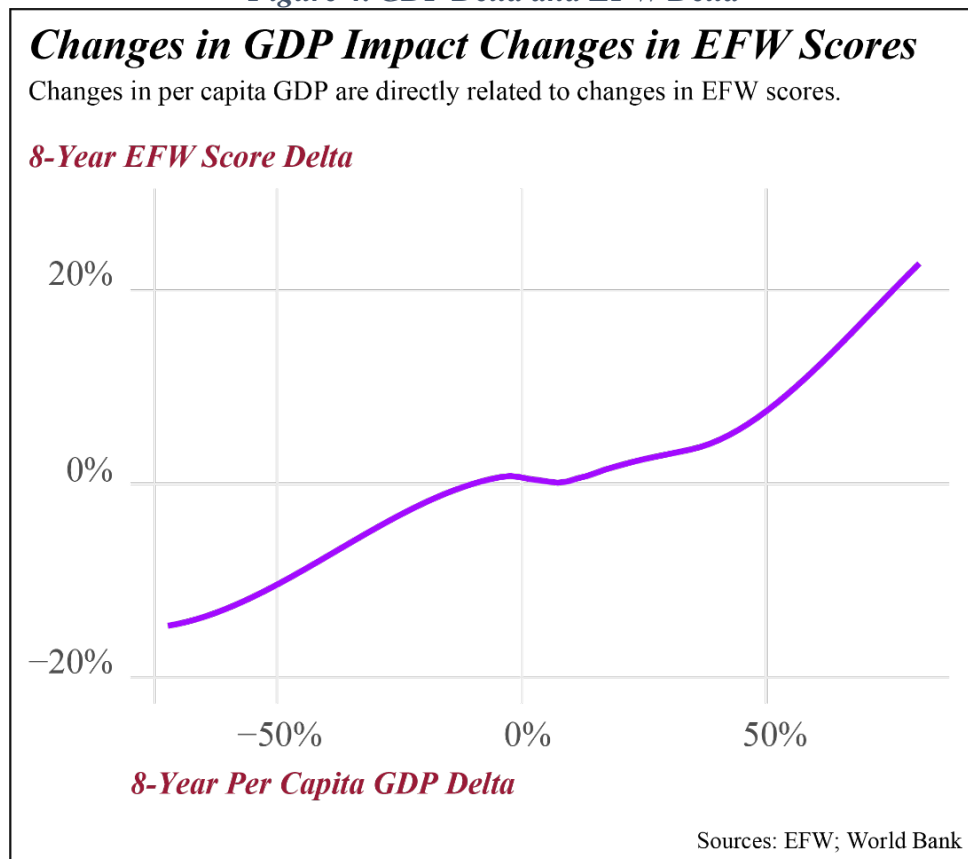
Table 3. Model 2: EFW Delta Regression Model

| Independent Variable | Description | Estimate | Error | p-value |
|-----------------------------|---|-----------------|--------------|----------------|
| RG | Representative Government Score | 0.10 | 0.09 | 0.26 |
| RGd8 | % Change in RG over 8 Years | 0.00 | 0.02 | 0.75 |
| FR | Fundamental Rights Score | -0.17 | 0.12 | 0.15 |
| FRd8 | % Change in FR over 8 Years | 0.14 | 0.08 | 0.10 |
| GDP | Initial per Capita GDP | 0.00 | 0.00 | 0.94 |
| GDPd8 | % Change in GDP over 8 Years | 0.15 | 0.04 | 0.00 ** |
| CPI | Corruption Perception Index Score | 0.00 | 0.10 | 0.97 |
| CPId8 | % Change in CPI over 8 Years | 0.02 | 0.04 | 0.58 |
| Relig | Proportion of Country that is Religious | -0.01 | 0.05 | 0.81 |
| Africa (East) | UN Region Designation | 0.01 | 0.06 | 0.80 |
| Africa (Mid) | UN Region Designation | 0.06 | 0.07 | 0.36 |
| Africa (North) | UN Region Designation | -0.09 | 0.06 | 0.14 |
| Africa (South) | UN Region Designation | 0.00 | 0.06 | 0.96 |
| Africa (West) | UN Region Designation | -0.01 | 0.06 | 0.81 |
| America (Cent) | UN Region Designation | -0.04 | 0.06 | 0.48 |
| America (South Tropic) | UN Region Designation | -0.10 | 0.06 | 0.08 . |
| America (South) | UN Region Designation | -0.06 | 0.06 | 0.30 |
| Asia (Cent) | UN Region Designation | -0.04 | 0.07 | 0.57 |
| Asia (East) | UN Region Designation | -0.01 | 0.06 | 0.93 |
| Asia (South) | UN Region Designation | -0.04 | 0.06 | 0.48 |
| Asia (Southeast) | UN Region Designation | 0.00 | 0.06 | 0.97 |
| Asia (West) | UN Region Designation | -0.01 | 0.05 | 0.80 |
| Australian | UN Region Designation | 0.00 | 0.06 | 0.97 |
| Caribbean | UN Region Designation | 0.00 | 0.06 | 0.94 |
| Europe (East) | UN Region Designation | -0.02 | 0.05 | 0.74 |
| Europe (North) | UN Region Designation | 0.01 | 0.05 | 0.77 |
| Europe (South) | UN Region Designation | 0.01 | 0.05 | 0.79 |
| Europe (West) | UN Region Designation | 0.01 | 0.05 | 0.83 |

increase in this variable is associated with a 15 percent increase in EFW scores over the period, which reveals there may be a strong direct impact on economic freedom growth attributed to changes in GDP levels over time. No other variables in the model show a significant connection to temporal changes in the EFW variable.

The relationship between changes in per capita GDP and changes in EFW scores revealed in Model 2 is illustrated in Figure 4. These results indicate that changes in economic freedom may not be tied to the same factors that determined their current levels and could prove to be exceedingly difficult to predict. Additionally, they suggest that not only are changes in GDP significantly related to overall economic freedom levels more

Figure 4. GDP Delta and EFW Delta



so than initial GDP, they are also significantly associated with changes in EFW ratings over time while none of the other variables show any such temporal significance.

These findings support the notion of a symbiotic relationship between economic freedom and changes in GDP. While such freedom has been determined to have a positive influence wealth and prosperity, it may be the case that this process creates a feedback loop in which the causes of economic freedom are further buoyed by the positive results that ensue. As governments realize the benefits of the free market approach to their economies, they are further incentivized to implement even more liberal approaches, which in turn foster greater returns. This effect appears to have a limit, though, potentially due to economic volatility or the need for governmental regulation to ensure fairness and integrity within the marketplace, in which countries that experience exceedingly high GDP growth tend to reduce their open-market policies.

5. Summary

Economic freedom has been widely acknowledged as an efficacious approach to sound market policy and is generally recognized as an important contributor to prosperous societies. Less clear are the factors that lead to the emergence of economic freedom and promote its endurance. The intention of this study is to improve the gap in our knowledge of the determinants of economic freedom and what allows it to thrive internationally. It explores many of the key theories that proposit to explain the presence of freedom in the marketplace, and attempts to provide fresh explanations and insights regarding the existence and sustainment of economic freedom through the analysis of variables that have been previously examined and some that not as widely considered.

As economic freedom has emerged as an evident contributor to wealth and prosperity around the world and has arguably improved standards of living beyond any approach implemented to date, it is only logical for countries to place economic freedom as an objective fiscal goal, if not a moral standard. In an endeavor to advance the state of research toward reaching this goal, this study has developed of a robust factorial model that encompasses a variety of relevant variables that reveal potential causal inferences regarding the emergence and preservation economic freedom worldwide. The results support the supposition that economic freedom is most prevalent in countries that have high levels of political representation and low levels of public corruption. The study concludes that changes to per capita GDP over time are also directly associated economic freedom ratings, and that these changes appear to affect the rate in which EFW scores change unlike any of the other variables tested. This effect appears to exist for all countries regardless of their initial GDP levels, but the magnitude and direction of the change in GDP affects the nature of the EFW score deltas. The effects of perceived corruption appear to be the most substantial of the variables examined and suggest that eradicating corruption should be of primary importance in any governmental efforts to increase economic freedom and obtain its associated benefits.

The degree of fundamental rights afforded to citizens within a country was not found to significantly affect the level of economic freedom present in its marketplace. These results indicate that greater economic freedom levels associated with democratic systems may be attributed more so to the presence of political representation within these countries than to some of the other tenants of democracy they may observe. The results further support arguments claiming the superiority of democratic approaches to economic

policy over those of the socialist philosophies that are so popular in American politics today. They demonstrate that, while the siren's song of socialism may be attractive to those seeking to solve the problems of the masses through the restriction of wealth creation mechanisms disproportionately enjoyed by the relatively few, socialism actually tends to impair the factors that produce prosperity for all. As confirmed in this study, the advancement of society through the practice of democratic governance, complete with its flaws and pitfalls, is indubitably the most effective approach thus far conceived.

The importance of this finding is not to be understated. Despite the epic failures of all noteworthy socialistic movements of the 20th century³¹, many of the same Marxist ideals that inspired these unfortunate examples are being promoted in the American political arena today. In the past two presidential election cycles, Bernie Sanders, who grounded his candidacy on an avowed socialist political platform, was nearly selected as the Democrat party nominee, and the popularity of his message is hardly in dispute³². His socialist aspirations represent a trend in American politics that places in jeopardy the free market ideals through which the US has achieved such lofty economic standards and significantly improve the conditions for so many denizens of this planet. In turn, anti-establishment and anarchist groups like as Black Lives Matter and Antifa are calling for the dismantling of the American socio-economic system due to historic inequalities and professed flaws in its current practice of western democracy³³. This study reaffirms the benefits of fostering economic freedom through democratic governance while

³¹ Perry, Mark J. 2016. "Why socialism always fails." American Enterprise Institute. Washington, DC

³² Rakich, Nathaniel, Yutong Yuan. 2020. "Can You Guess How Popular Bernie Sanders's Policies Are?" FiveThirtyEight

³³ Op-Ed. 2020. "Groups like Antifa and Black Lives Matter are trying to destroy America from the inside. It's working." Newsbreak. Seattle, WA

highlighting the tendency of undemocratic systems to stifle such conditions. Wider acknowledgement of these realities is essential to bolstering the position of those who advocate for the proliferation of free market policies and the protection of long celebrated democratic principles within the US and across the globe.

Results regarding the religiosity variable indicate that the degree of religious belief in general within country does not appear to be significantly associated with its level of economic freedom, nor is it related to changes in EFW ratings over time. While there may be significant impacts attributed to some religions regarding the functioning of market economies, this study found no link between religiosity in general and economic freedom levels, or how those levels may change over time.

Geographical influences may have some utility in explaining the factors that contribute to economic freedom worldwide. The countries that exercise the least amount of economic freedom in their markets are mainly located in Africa and South America and also have some of the poorest performing economies. To improve the prospects of these developing areas, it is important to fully understand the dynamics that drive their economic paradigms and the particular impediments to economic freedom they face that preclude the advancement of their interests in this regard.

The effects of economic freedom may be well-known, but its causes are somewhat more mysterious. The results of this study have uncovered areas of potential interest in the search for the factors that most lead to increases in the adoption of economic freedom and the promotion of its growth and perpetuation. Although a fully comprehensive model may not be practically feasible in reality, the demonstration of potential casual linkage found in some of the variables of interest here suggests that other

areas may need to be investigated to further enhance our knowledge of the workings of free markets. If advances can be made in the understanding of the true causes of economic freedom, it may be possible to exploit its power to improve conditions for untold beneficiaries around the world.

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7. Curriculum Vita

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